

REMARKS

Claim 18 is amended by limiting the active compound of the composition to a serine or alanine compound having a hydrophobic group selected from the group consisting of a C1-13 phenylalkyl group, a cyano group and a C1-C13 haloalkyl group.

Claim 19 is rewritten as an independent claim.

Claim 45 is canceled.

New claim 46 relates to the subject matter of claim 21 and depends from amended claim 19.

No new matter is presented.

Accordingly, upon entry of the Amendment, claims 1-19, 21, 25-26 and 46 are pending in the application. Of these, claims 1-17 and 25-26 are withdrawn and claims 18, 19, 21, and 46 are before the Examiner for examination.

I. Response to Rejection under 35 U.S.C. § 112, First Paragraph

Claim 45 is rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. Specifically, the Examiner states that new claim 45 is new matter because the specification does not provide support for the recitation "wherein the D-serine transport inhibitor has at least 5-fold selectivity".

Applicants note that claim 45 was added at the suggestion of the Examiner during the Interview conducted on February 22, 2006. However, without conceding the merits of the rejection, claim 45 is canceled herein in an effort to facilitate and expedite examination.

Accordingly, Applicants respectfully request withdrawal of the §112, 1st paragraph rejection.

II. Prior Art Rejections under 35 U.S.C. § 102 and under 35 U.S.C. § 103

Claims 18 and 45 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Takuma et al.

Claims 18, 21 and 45 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Tsai et al.

Claim 19 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tsai et al in view of Javitt (WO 97/20553).

Applicants respectfully submit that the cited references do not disclose, teach or suggest the presently claimed invention.

Claim 18 is amended herein by limiting the D- serine transport inhibitor compound as the active ingredient of the composition to a serine or alanine compound having a hydrophobic group selected from the group consisting of a C1-13 phenylalkyl group, a cyano group and a C1-C13 haloalkyl group.

Claim 19 is rewritten as an independent claim and recites D-alanine dodecylamide as the D-serine transport inhibitor compound, which is the active ingredient of the composition.

Neither of Takuma et al, Tsai et al nor Javitt disclose, teach or suggest a serine or alanine compound as recited in amended claim 18 having a hydrophobic group selected from the group consisting of a C1-13 phenylalkyl group, a cyano group and a C1-C13 haloalkyl group.

Further, neither of Takuma et al, Tsai et al nor Javitt specifically disclose a composition comprising a D-alanine dodecylamide compound as recited in amended independent claim 19.

Claims 21 and 46 depend from claims 18 and 19, respectively, and are distinguished for at least the same reasons. For at least this reason the present claims are not anticipated by any of the cited references.

With respect to the obviousness rejection of claim 19 based on Tsai et al in view of Javitt, Applicants respectfully submit that neither one of Javitt or Tsai et al teach a selective D-serine transport inhibitor as recited in amended claim 18, much less the specifically claimed selective D-alanine dodecylamide compound as recited in amended claim 19. The evidence of record as provided in the Examples of the specification and the Declaration under 37 C.F.R. § 1.132 filed on January 13, 2006 shows that the claimed compounds provide unexpectedly superior properties, such as selectivity, which is not taught or suggested by any of the cited references. For example, in Example 3 on pages 10-11 of the present specification, treatment with D-alanine dodecylamide led to a 250% increase in specific binding to NMDA receptors and a significant trend toward increase in specific binding than under control conditions. These findings support the concept that D-serine transport inhibitors of the present invention potentiate NMDA receptor-mediated neurotransmission *in vivo*.

In Tsai et al, only the amino acids themselves, i.e. D-serine, D-alanine and N-methylglycine were manufactured and tested. There are no specific embodiments in Tsai et al employing a serine or alanine compound within the scope of present claim 18 or D-alanine dodecylamide compound as recited in claim 19. On the other hand, in the present invention, D-

alanine-dodecylamide provided unexpectedly superior results in that it showed a different pattern of activity in the inventive assay than GDA or D-serine-dodecylamide and inhibited amphetamine-induced hyperactivity whereas GDA did not. Thus, D-alanine-dodecylamide would be expected to have superior efficacy relative to other compounds, which would not have been expected based upon the disclosures of Tsai and Javitt.

In view of the above, the presently claimed invention is not rendered obvious by the cited references. Accordingly, Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. §103.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


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